WHAT IS CLAIMED IS:

1	1. A computer program product for editing a file describing a circuit
2	design so that HDL code in the file is compatible with a new programmable logic integrated
3	circuit (IC), the computer program product comprising:
4	code for locating black box declarations and black box instances in the file;
5	code for gathering information about the black box declarations and instances;
6	code for editing the black box declarations to create equivalent black
7	declarations that are compatible with the new programmable logic IC using the information;
8	code for editing the black box instances to create equivalent black box
9	instances that are compatible with the new programmable logic IC using the information; and
10	a computer readable medium for storing the codes.
1	2. The computer program product defined in claim 1 further comprising:
2	code for generating a warning if an equivalent black box compatible with the
3	new programmable logic IC cannot be located for one of the black box instances or
4	declarations.
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1	3. The computer program product defined in claim 1 further comprising:
2	code for automatically connecting any dangling signals or unused ports in the
3	equivalent black box instances to pre-selected terminals.
1	4. The computer program product defined in claim 1 wherein the code for
2	gathering the information about the black box declarations further comprises code for
3	determining a number of input ports and output ports for each of the black box declarations.
1	5. The computer program product defined in claim 4 wherein the code for
2	gathering the information about the black box instances further comprises code for
3	identifying input signals coupled to each input port of the black box instances, and code for
4	identifying output signals coupled to each output port of the black box instances.
1	6. The computer program product defined in claim 1 wherein the code for
2	gathering the information about the black box declarations further comprises code for
3	determining a function performed by each of the black box declarations.

1	7. The computer program product defined in claim 1 wherein the
2	computer program product comprises Tcl code that is executed as a script sourced through an
3	executable in a synthesis tool.
1	8. The computer program product defined in claim 1 further comprising:
2	code for stopping and restarting the codes that implement a design conversion
3	process for the circuit design without having to reparse the design conversion process from
4	the beginning; and
5	code for saving a state of the design conversion process to memory.
1	9. The computer program product defined in claim 1 further comprising:
2	code for generating a detailed report that indicates where the black box
3	declarations and instances were found in the code and the equivalent declarations and
4	instances that the black boxes were replaced with.
1	10. The computer program product defined in claim 1 further comprising:
2	code for converting timing constraints associated with the circuit design to be
3	compatible with the new programmable logic IC.
1	11. The computer program product defined in claim 1 wherein the code for
2	locating black box declarations and black box instances in the file further comprises code for
. 3	identifying blocks of code that do not have body definitions as black box declarations.
1	12. A method for editing a file describing a circuit design so that the file is
2	compatible with a new programmable logic integrated circuit (IC), the computer program
3	product comprising:
4	identifying black box declarations in the file;
5	identifying black box instances in the file;
6	collecting information about the black box declarations and instances;
7	editing the black box declarations to create equivalent black declarations that
8	are compatible with the new programmable logic IC using the information; and
9	editing the black box instances to create equivalent black box instances that
10	are compatible with the new programmable logic IC using the information.
1	13. The method defined in claim 12 further comprising:

2	generating a warning if an equivalent black box compatible with the new
3	programmable logic IC cannot be located for one of the black box instances or declarations.
1	14. The method defined in claim 12 further comprising:
2	automatically connecting any dangling signals or unused ports in the
3	equivalent black box instances to pre-selected terminals.
1	15. The method defined in claim 12 wherein collecting the information
2	about the black box declarations further comprises determining a number of input ports and
3	output ports for each of the black box declarations.
1	16. The method defined in claim 15 wherein collecting the information
2	about the black box instances further comprises identifying input signals coupled to each
3	input port of the black box instances, and identifying output signals coupled to each output
4	port of the black box instances.
1	17. The method defined in claim 12 wherein collecting the information
2	about the black box declarations further comprises determining a function performed by each
3	of the black box declarations.
1	18. The method defined in claim 12 wherein identifying black box
2	declarations in the file further comprises identifying blocks of code that do not have body
3	definitions.
1	19. The method defined in claim 12 further comprising:
2	converting timing constraints associated with the circuit design to be
3	compatible with the new programmable logic IC.
1	20. The method defined in claim 12 further comprising:
2	generating a detailed report that indicates where the black box declarations
3	and instances were found and the equivalent declarations and instances that the black boxes
4	were replaced with.